

A Critique of Libet and Wegner's Argument Against Free Will

Ferdinard Fosu-Blankson*, Husein Inusah[†]

Abstract

The research of Benjamin Libet and Daniel Wegner are groundbreaking works in neuropsychology that make arguments against human freedom. However, Libet's and Wegner's arguments are marred with some philosophical inconsistencies including; misconceptions, logical errors, and causal fallacies which seems to emanate from the problem of subjecting the concept of free will to an empirical enquiry only. In this essay, it is argued that empirical enquiry alone limits the study of the role of consciousness and its involvement in decision-making. It is suggested that scientific assessment alone may not be exhaustive in the evaluation of the idea of free will considering the role of consciousness and the absence of causal evidence between the interactions of the mind and the brain.

Key Words: free will, readiness potential, conscious will, decision-making

DOI: 10.5281/zenodo.7740201

Introduction

In recent decades, the studies of Libet and Wegner have been taken to demonstrate that we lack free will. This neuropsychological analysis is an addition to the chain of sceptical arguments on the existence of free will including Nietzsche², Gazzaniga (1998), Smilansky (2000), and Pereboom (2001). Libet (1985) proves the limitation in the brain's activities by showing the pre-occurrence of the readiness potential (RP)³ about 350ms to the awareness of a voluntary act and 500ms before the actual action. Notwithstanding the idea that desires and intentions can cause actions, Libet posits that the occurrence of a readiness potential happens before our opportunity to veto actions, a period within which our intentions and desires can be efficaciously expressed. Thus, his experimental implications validly imply that the readiness potential is, very likely, the determinant of our intentions

Corresponding author: Husein Inusah

Address: Department of Classics and Philosophy, University of Cape Coast, Ghana

e-mail ⊠ hinusah@ucc.edu.gh

Received: 3 February 2023; Accepted: 17 March 2023

² as cited in Leiter, 2007

³ Readiness Potential is the electric unconscious brain current traveling through the synaptic network of a brain, initially called *Bereitschaftpotential* (BP) by Kornuhuber and Deecke (1965)

and desires. Albeit this psychophysical limitation, Libet's assertion of veto is a point of traction in his studies because of the room it creates for the operation of the will (free won't⁴ which is an intentional declination to a spontaneous unconscious course of bodily action). Free will then is intelligible in Libet's studies as a form of negative attitude towards an unconscious behavioural stimulus of the human body.

Wegner (2002) consequently argues that the claim that humans have free will is a deception of the mind that makes us feel our will has causal potency on our actions. This position holds that our minds enchant us and consequently makes us feel like we are uncaused causes of our actions (Wegner, 2008). Strictly speaking, Wegner opines that the problem of free will is due to a deception of our minds. This deception by the mind on an agent willing free decisions and actions, (which is the thought of having an efficacious conscious will) obstructs our understanding of the scientific, psychological, neural, and social origins of our thoughts and behaviour. Thus, we are often veiled by the illusion of the conscious will, namely that the conscious sensation we feel are voluntarily causing a bodily movement. That is to say, the sensation that occurs sometime after the RP-onset but before the electromyography (EMG) signal onset in Libet is an illusion and not the actual cause of the movement. Wegner's works, for example, had ingenious discoveries that are highly persuasive. For instance, Wegner in his epiphenomenalistic framework⁵ of the self identifies the self as a mere observer that experiences the will and is mentally convinced of agency due to the trick of the mind. That is to say, we may have an apparent causal thought of action which corresponds to the action but not the actual cause of the action.6 There is an absence of a causal relationship between thought and action, yet there remains a weak but convincing causal inference between a person's thought and action which is superficial.

Over the years, Libet's and Wegner's works have attracted barrage of rejoinders. For example, Radin (2002) identified and analysed the time reversal error in Libet's experiment. Nahmias (2002) argues that there is more to the efficacy of the conscious will than what Wegner identified. In denial of Wegner's causal determinism, Nahmias argues that sometimes cognitive neuroscientists

⁴ Free won't is expressive in a neurophysiological system, take Maria Carlsson's Dual-Accelerator-Brake Model of focused attention and its dysfunction in ADHD, for example. In this model, dopaminergic neurons in the brainstem ventral tegmental area are excited by the neurotransmitter glutamate (the Accelerator) arriving from the cerebral cortex. But very shortly thereafter, the dopamine neurons are inhibited by the neurotransmitter GABA (the Brake) from local interneurons. Depending on the summed actions of incoming glutamate and GABA, the targeted dopamine neuron may or may not itself discharge. The mental function of focused attention arises in part through this interplay of Brake and Accelerator across many neurons. In Libet's conception of a simple voluntary action, the unconscious processes underlying the RP push the action forward while free won't (optionally) pulls it back.

⁵ Wegner's conception of the self and the causal deterministic human body is undoubtedly argued to be epiphenomenal (Nahmias, 2002).

⁶ Wegner and Wheatley, 1999: Apparent mental causation: Sources of the experience of will.

conceptualise determinism to mean our actions happen to us and they occur by bypassing our conscious deliberations and decisions7. Mele (2008) is one of the first to critique both Libet and Wegner in tandem. Mele indicates that while Libet argues that the conscious intention to one's action has a window opportunity to make a change (veto8) during the course of action, Wegner's argument denies the conscious will of any efficacious potentiality. According to Mele, these contrary views do not seem to form a formidable threat to free will. Meanwhile, Carruthers (2010) argues against Wegner to prove that agency is not illusory but causative. Radder & Meynen (2012) expose causal inconsistencies in Libet's argument to prove that the brain is not in total control. In addition to some critiques that have been already established especially by Nahmias, Mele, and Carruthers, this essay further shows why the physical and cognitive limitations set by Libet and Wegner are weak. However, emphasis should be placed on the fact that the physical limitation, as expressed by Libet's work, is not a conclusive consequence of his (Libet's) position, rather a logical implication of his neurophysiological investigations that were motivated by Eccles.9 More specifically, the problem that this essay investigates is that neurobiological and psychological experiments are not sufficient to study the reality of free will. The counterclaims of Libet and Wegner in this essay are enumerated as the phenomenological objection, naturalistic fallacy objection, vague and equivocal objections and the fallacy of hasty generalisation.

The Phenomenological Objection

The conclusions of Libet and Wegner were based on experimentation. In the case of Libet, these empirical studies involved the recording of readings from EEG and EMG scans and recordings of participants' responses. Furthermore, Wegner deploys a theory based on experimentation that studied human actions and drew conclusions that infer the conscious will's incapability of causing any effect in the brain or any part of the body such that it will result in action. The realist position is that ontology is not contingent on conscious awareness. The fact remains then that without human experience in aetiology and decision-making, there would not emerge a conception of free will. The reality of free will is experienced and not covert to our perceptual perusal. However, our conscious awareness through our perceptual abilities helps us bridge the epistemic gap between the object out there and our existence. According to Husserl (1970), despite our epistemological ability to know the object out there, the conception of the object in question is not identical to the object itself. No matter the effort we put in to know something, there remains a

⁷ Nahmias, 2011. Is Neuroscience the Death of Free Will?

⁸ this is the ability of an agent to causally rescind a cerebral activity (Libet, 2004)

⁹ Libet was never against the idea of free will; it is just the case that his experiments implication placed his work (not his position) among free will skeptics.

specific transcendental part of the thing that is either covert to our knowledge, or more sophisticated than our present understanding could accurately capture. An example is the primary substance that sustains an existing object in various forms of reality. Wholesale understanding of such a substance is still largely concealed from human cognitive endeavours despite human current advancement in technology. For instance, during the process of perception, say a visual perceptual process, several factors tend to render perceptions of physical objects relative to our subjective interests because human beings are interested observers (Betrand Russel, 2009). Indeed, three people could identify a specific object as say, a chair, but other descriptions of the chair that constitute the actual chair may vary among the three people in question. This apparent variance may be due to colour, height, comfortability, quality, and neural configuration of the persons as at the time of perception. Other factors such as posture, size, position, and time among others may also contribute to the varied description of the chair. That is to say, the description of what people collectively observe may vary in terms of individual conceptualisation of the observed object. Human beings tend to conceptualise things differently and such individual conceptions cannot be accurately verified by another person or device without a considerable margin of error. Further, where a person has endeavoured to make an accurate conceptualisation of an object, she may fail to communicate her conception accurately. This happens in real life situations and the scientific domain is no exception to these anomalies. Measurement values and other scientific observations cannot be said to reflect an accurate reflection of how objects are in themselves.

In Libet's and Wegner's studies, they engage in empirical (scientific) processes. Libet tests the presence of RPs, their timing, and efficacy during voluntary acts, while Wegner formulates the theory of apparent mental causation in an attempt to establish the unconscious system responsible for human actions rather than (conscious) human agency. However, these experimentations cannot be said to yield accurate picture of what transpired in the conscious configuration of the participants of these empirical studies.

In Libet, for instance, the apparent margin of errors in his experiment were catered for by approximating the results rather than stating specific values.

In spite of not being able to state exact results, two issues can be identified in Libet's experiment that make it highly prone to generating erroneous results. The first is the inexactness of the participants' subjective reports¹⁰, and the second is the identification and purpose of RPs. Both issues border on cases that deal with conscious experiences that are covert to the third person's opinion unless with

ISSN 1307-6531, JNphi, Since 2007

¹⁰ First discussed by Banks & Isham and Mele in: W. SINNOTT-ARMSTRONG, L. NADEL (eds.), Conscious Will and Responsibility: A Tribute to Benjamin Libet.

the participant's aid (on her subjective report of awareness) or the aid of a machine readings by electrodes (on the reading of RPs).

In Libet's experiments, the participants' subjective reports were among the three key sources of information (aside from the RP recordings from the electrodes and the EMG recordings from the wrist muscle). The subjective reports were meant to determine exactly when the participants planned to act. However, the reliance on the subjective reports yielded an unexpected change of results as some participants spontaneously acted and others pre-planned their actions. This differences in timing resulted in inaccurate results. For instance, if some fraction of micro-seconds could be lost by the participants' failure to capture the timing and report it as it is, then one cannot be sure to have an accurate result. Despite Libet's experimental preparedness to have all issues of timing sorted, there were still questions, as one could note, about the account concerning the exact time participants became aware of their intention along with the oscilloscope timing due to time lag. Per the constant flow of time, it seems impossible to believe that the oscilloscope screen time would be captured in its exactitude because at the time that the participants may realise that they are aware of their decision, the state of realizability may have happened at a spot that might not have been accurately captured.

In addition, to allow participants to report when to act or otherwise (as demanded by Libet) seems to us counter-intuitive because it depicts a dissociated self. Roughly, Libet's request to the participants was to report individual relative times when conscious awareness of decision-making commences. This nature of the demand purports that the participants stay consciously alert, while monitoring their unconscious selves till the point when the unconscious self (the unconscious cerebral process) is offered a window opportunity (veto) to allow the conscious self to act. The demands of this exercise are counter-intuitive as it requires one to be aware so as to understudy their own unawareness. For the conscious self to monitor the unconscious self is to be in a room and be absent simultaneously. When the body is in an unconscious state, it is conceived that the state of consciousness is absent. Concerning a temporal act, the conscious and unconscious state cannot run concurrently during a specific period. One cannot be conscious and unconscious at the same time. So here, it could be argued that the timing of the raw experience to be communicated is lost due to the constraint on participants to produce a timely report of when they were consciously studying their unconscious state.

Furthermore, despite the seeming accuracy with measured ratings of Electric Potentials (EPs) in Libet's experiment, an attempt to conclude in conjunction with subjective timing of awareness draws the credibility of the experiment into disrepute. In Libet's controlled experiment, the participant indicates the point on the oscilloscope

screen when she became aware of her decisions. However, at the point when the participant is to act voluntarily based on her conscious will, it then becomes a planned voluntary decision (Libet calls this Type I RPs) rather than a spontaneous voluntary one (Type II RPs). The decision becomes planned (Type I RP) because the participant has been directed that she is supposed to act within a specific period. The participant, then, find herself in a state of preparedness to decide. Therefore, in our view, the case of Libet distinguishing between Type I RPs and Type II RPs (Libet, 2004, p. 131) is not relevant because the case he considers as Type I RP (pre-planned decisions) are the same as the Type II RP (spontaneous decisions). The difference in timing (Type I RP – 1000ms and Type II RP – 550ms) can be said to be a mere delay in decision. All the decisions in Type I and II RP experiments are pre-planned. Thus, while the participants in Libet's experiment reported to have experienced the conscious willing of wrist flexion spontaneously, the wider experimental context entails preplanning of a kind that infuses into single trials, rendering them no longer spontaneous.

Another issue borders on the identification and indication of the purpose of RPs. This issue is worth engaging because the RPs (electric potentials) are signals that come as triggering initiated from the peripheral nervous system carrying information. These RPs are electric activities, and the information they carry cannot be observed. RPs are connected as they trigger through the spongy cells of the neuronal network. A challenge for Libet's investigation is his inability to perform an intracortical reading due to the health risks involved. Instead, Libet appropriately goes with scalp readings performed with the electrodes of an EEG scan. Nevertheless, for the search, readings, and purposes of RP's, there could be some implications due to the outer reading technique. The RPs are just electric signals, and they do not have individual names. So, this technique observes only the area where the RP occurs to identify the RP. Further on cranial limitations, we lack the know-how to sample RPs to know their content or purpose.¹¹ Even though EP (electric potential) latency variations do not offset the timing of RP-onset and conscious willing. Such technique of scalp reading remains insufficient to completely detail what the RP is, its role with consciousness and other purposes beyond cranial inhibition. Rather, what is being observed, with a programmed device, is a series of RP events, which are interpreted and assigned purposes upon observation.

Wegner launched his attack on the intelligibility of free will by validating the illusion of the conscious will. The inefficiency of the conscious will is the reason why Wegner calls the conscious will an illusion considering its role in the causal chain

ISSN 1307-6531, JNphi, Since 2007

¹¹ The RP is observed as a voltage signal which has correspondence with neuronal orders, however, the readings of RPs do not indicate activities and intentions, rather they highlight the part of the brain in action and their corresponding body correlates.

of action. This illusion is experimentally explicated in Wegner's co-authored work with Wheatley. The intriguing facts of their experiment is that an epistemic delusion by the mind make us think that our thought causes our actions because the experiment outlined two paths that seem to lead to action but only one does. Wegner and Wheatley identify that these two paths emerge from unconscious activities in the brain. The path that does not causally lead to action is the seeming path to action and that produces the individual's thought which puts them under the conviction that they are in charge of determining their action meanwhile there is an unknown unconscious path of action that actually completes the causal chain of action. Wegner and Wheatley's indication of the unconscious path of action grounds their position on the unreality of mental causation in action for the actual causal path has no mental involvement and what is considered mental emerges from an unconscious process. The observed series of event that are not directly known to the agent during action cannot be said to be purely or entirely unconscious without an examination of internal causal processes. Here, the point of our objection is focused on the unwarranted causal inference made by Wegner and Wheatley. That is, the internal causes that eventually lead to action are not observable, rather, the series of events are observed. The unobservability of causation does not create a sufficient ground for the claim of an unconscious causal path over a conscious path to action. Since humans are naturally limited with ability in observing a causative power, there are no sufficient grounds to claim an unconscious process's efficacy devoid of any conscious role.

Vagueness and Equivocal Cases

Initiation (which is roughly the starting point of a conscious action) is vaguely expressed by Libet because the event of RPs preceding the will does not necessarily imply that the RPs are the causal powers¹² responsible for human action. In Libet's works, he argues that the RPs precedes the conscious will which seems to further imply that there is an unconscious process that precedes free will. In other words, the initiation of human action is causally determined by the RP, according to Libet. The problem, however, is that one cannot ostensibly indicate what causes the human action in question. The initiation point could

¹² There is a minor debate within EP research about whether or not EP components themselves can create functional changes in the brain. E.g., the electromagnetic field of the EP itself changes the neuronal or astrocytic membrane state in such a way that it would alter physiology. The matter is unresolved, but the great majority of EP researchers see the EP components not as causes, but as mere *signs* of the neurophysiological processes that dictate function and behavior.

be any other "cause" occurring in the unconscious cerebral process before the operation of the conscious will, hence vague.

This argument is buttressed by Radder and Meynen (p. 4) who argue that the unconscious brain process that initiates a free voluntary act leaves open the precise conceptualisation of the RPs as possessing causal efficacy. They argue that due to the vague conceptualisation of the RPs, one could interpret them as either the cause, necessary condition, correlated event, or a configuration regularly preceding the will. But none of these conceptualisations of the RPs is compelling enough even if we grant them plausibility for the sake of argument. First, to claim that the RP is the cause of free voluntary acts amounts to saying that out of nothing (devoid of willingness, intentions, and awareness), the readiness potential can generate an activity as an originator or a force. The conception of readiness potential as possessing autonomy and acting as a force is untenable. Such force is conceived (by Libet) to bring forth (out of nothing) a chain of effect, creating a voluntary free act. The conception of the readiness potential as a force portrays the readiness potential as a causal substance, which is likely to lead to a regress problem of causes. In a similar instance, considering the readiness potential as a necessary condition does not suffice for varying cases of voluntary acts. If the readiness potential operated as a necessary condition for voluntary free acts, why do individual acts undergo vetoing by the conscious will, and why aren't all actions of equal energy and nature? A kind of necessary condition tying readiness potential with voluntarily free acts ought not to yield varying consequences. Again, if the readiness potential is perceived to be correlated to voluntary free acts, it does not imply a necessary connection since both could be properties of some other unidentifiable cause. An assumed inference between the conjunction of the presence of readiness potential and a voluntary free act is not enough to claim a causal flow (one initiating the other). Finally, perceiving the readiness potential as a regularly preceding event is not sufficient to explain the readiness potential as an initiator because both readiness potential and will could be said to occur in the human biological system leading to action. Among the internal causes leading to an action, there is a possibility that a preplanned intention could be the drive to actualise the action while the readiness potential occurs.

For the discourse on initiation, the readiness potential is expected to have originated from a source but the level of spontaneity attached to Libet's discussion on the readiness potential makes its source vaguely expressed. This makes it unconvincing that the readiness potential in a mysterious nature seem to regularly fall in line with intentions. Aside from the vaguely pointed readiness potential by Libet as an initiation event, as Radder and Meynen indicated, the readiness potential alone is insufficient in causing a voluntary free act. For instance, the accuracy rate with which an agent performs an

intended act leaves it inapprehensible that a random and spontaneous event could be an accurate initiator leading us to our actions.

Another problem with the vagueness problem concerns the nature of some philosophical concepts found in Libet's works. The nature of these philosophical concepts does not allow them to be concretely expressed for testing. These concepts include free acts, the efficacy of the will, and vetoing. While, there are no boundaries ultimately expressing what a free act is, the efficacy of the will does not avail itself for verification. Also, vetoing is an internal move of the will that yield potency in controlling bodily actions and yet its metaphysical nature transcends scientific investigation. For free acts, participants' quest to demonstrate a free act is not overt for empirical testing. Even though the test is on the quest to find proof of free will or not, its evidential approach is veiled to the cognitive assessment procedures. Such cognitive assessment procedures that occur prior to actions are non-empirical. Hence, an empirical inquiry method to unravel such immaterial states with tools and enquiries of physical assessment sounds absurd. In the case of an attempt to examine the efficacy of the will, because the will is a non-physical phenomenon, physical assessment provides less understanding of what the will is and how it operates. The will (which generates from our consciousness) is analogously identical with the person in John Searle's Chinese room. 13 In the Chinese room experiment we do not know the mind, but we experience the mind as the machine of the Chinese room functions well without us knowing the one in there. Hence, some operations occur in the non-physical realm, which remains unobservable, but then, we observe a wave of effect in bodily actions. The will cannot be identified as a physical substance because it cannot be empirically appreciated or measured. Concepts that are non-factual (like the will and consciousness) fall beyond the neuropsychologists' assessment (like Wegner and Libet), so, the use of empirical tools alone may not be the appropriate techniques for investigation. This is to express that a vague understanding of the will is an insufficient ground to make factual claims on the will and its role in bodily action. Another concept for perusal is initiation. Even though there is a physical point at which an act begins yet, the concepts of initiation spur a debate due its regression on demystifying a source or origin. Thus, we cannot merely claim initiation to be of a physical point especially and interaction between the consciousness and a body. 14 The phenomenon of initiation in decision-making is not accessible and is covert to an empirical investigation by an observer.

There is also the problem of the misappropriate use of words. Mele identifies this problem by claiming that Libet uses the terms;

¹³ Searle, 2009

¹⁴ The RP-onset latency is often used as the initiation timepoint for the motor act and it recurs reproducibly as such. While we cannot say for sure that the RP-onset is the initiation point, we can say that the act initiated at least as early as the RP-onset (and possibly earlier). And this point is before the conscious sensation of will.

decision, intention, want, wish, and desire interchangeably. Mele intends to clarify people's misconception of equating wanting to do something and deciding to do it. Mele asserts that the two are not the same. According to Mele (2006), believing to decide A makes one form the momentarily mental action of an intention to A. Mele claims, for example, that the intention of making picking a desert is different from the mere wanting of a desert. From Mele's claim, we realize that "wants" seem more of an urge while intentions feature a "self-determined motive" to act. Libet's readiness potential, to Mele, is more likened to the urge, want, or desire. The want, urge, or desire comes after the formed intention (Mele, 2009). Therefore, Mele opines that our intentions form the essential part of having free will by associating the readiness potential with wants, hence, the readiness potential occurs after a person's intention.

In the case of Wegner, his usage of the term "consciousness" breeds some conceptual inconsistencies which renders the idea of illusive conscious untenable. Strictly speaking, the Wegner's vague use of the term consciousness appears to impair the meaning of his claims discussed below. For example, David Chalmers avers that humans seem to have much more innate knowledge of consciousness world, but comprehend the world better than consciousness. 15 The inaccurate comprehension of consciousness is a challenge for most students of consciousness. Often people refer to certain states as conscious without an appropriate characterisation 16, and Wegner is no exemption. In Wegner's The Illusion of Conscious Will, he describes, not in clear terms, several mental states as "consciousness" without individuating these forms of consciousness. (Wegner, 2002, pp. 17, 21, 28, 57, 60, 139, 163). It may be observed that in Wegner frequent use of the term "consciousness", he intends to talk about awareness (as rightly described by Chalmers¹⁷ to be access consciousness). Several mental states can be categorised, yet, phenomenal, access, and intention/representational acknowledged.¹⁸ consciousness most are the consciousness includes mental states such as raw feels, and qualitative states, like qualia, which characterises our subjective feel with directly sensible qualities. Access consciousness deals with informational consciousness, and this functions with immediacy to awareness, so only the individual can report being in such a state. The intention/representational content consciousness consists of our intentions, desires, wants, plans, and others. Misrepresentation of these categories will generate ambiguities, and this is exactly what Wegner does. For instance, Wegner (2002, p. 60) creates an equivocal chain in the last two paragraphs as he ambiguously uses the term consciousness four times. In these instances, consciousness

¹⁵ Chalmers, 1996, p. 3

¹⁶ Elzein, 2020, p. 6

^{17 1996,} p. 211

¹⁸ Elzein, 2020, p. 6

represents access consciousness, phenomenal consciousness, intention/representational content consciousness, and the collective idea of consciousness, respectively. Wegner's equivocal use of the word consciousness makes it unclear to outline the kind of consciousness that he argues to be epiphenomenal or lacking causal efficacy.

Another objection to Wegner's thesis is that he appears to misinterprets the self. He appears to argue that the self is made of different entities (conscious and unconscious) which give the signal as though they are parallel entities. In Wegner's thought, he seems to be strongly convinced of the unconscious cerebral causes of our conscious processes such that he does not present the conscious self and unconscious self as a wholesome entity constituting the self. In some cases, Wegner claims that we are sometimes oblivious to the mental operations that produce certain thoughts (Wegner, 2002, p. 67). Such claims seem to project dissociated identities in a person. Wegner projects the idea of the self as a witness, observer, or mere perceiver of unconscious bodily activities. He focuses his studies on what a conscious will is from a cartesian purview, and with this understanding, he can conclude that the conscious will is an illusion.¹⁹ But such a conception of the self by Wegner depicts a cartesian ghost in a machine. There are no multiple identities at all. Moreover, what is supposedly thought to be dissociated is a person's presentation of different mental states. We can understand that the self is a conscious being that can have a conscious and unconscious state. Even though it is believed that intentions, will, and plans are sometimes manifested in a conscious state, it does not preclude the idea that our unconscious states are not different from us. The will can manifest in an unconscious state²⁰, and also in the conscious state to produce intentions.²¹

The Naturalistic Fallacy

Libet's and Wegner's attempt to empirically investigate free will lead to the naturalistic fallacy. Hume has argued that values are the projections of natural human desires and that values are projections of desires that aim at the common good of society²². This conception goes for both sects that may judge human actions to either free, determined, or any other form. Arguing for the reality of free will, most scientists have avoided the act of deliberating with alternative choices to be free will but strive to categorise human actions as deterministic for the explanative accounts of decision-making and human actions to be consistent with other scientifically accepted assertions and conceptualisations. Wegner asserts that the conception of free will and

¹⁹ Spaak, 2009

²⁰ Deecke, 2012

²¹ Mele, 2009

²² As reiterated by Curry (2006) Who's afraid of naturalistic fallacy?

conscious willing to actions are illusory and obstruct our understanding of the scientific, psychological, neural, and social origins of our thoughts and behaviour (2008, p. 226). Free will is not an objective reality, rather, it is a subjective reality that is value-based. Its subjective and mysterious nature is the reason free will is a philosophical issue. The conception of free will is a universal thought, for it applies to all, hence, people share relative views about this subjective reality (free will). People live knowing the problem of free will but can choose to either believe in it or not.

Libet has doubts about human freedom due to his scientific research, and Wegner adheres to the position that human nature is causally determined. Therefore, we ought not to be regarded as free agents. This view commits the naturalistic fallacy.

Since free will is a core feature of human morality, all issues pertaining to free will affect our conception of morality. The attempt to use naturalistic standards or determinants to define free will drives us to commit a naturalistic fallacy. Free will, which is a value-based concept, is agreeably a social construct. However, just as we may appreciate or trivialise the concept of money, the same applies to free will because they are a societal construct. Money, for instance, has evolved over ages depending on value, purpose, and comfortability. Before, money was cowry, gold, and other items, till it evolved to coins, then paper, and now the world today deals with electronic money. Similarly, the concept of money could be appreciated or not depending on society's values and conventions. Humankind naturally does not need the concept of money or free will for survival. Nevertheless, both money and free will are essential societal concepts that man is required to embrace to fit in society.

The usage of objective empirical standards to judge free will indeed run into a naturalistic fallacy. From Libet's studies, the timing, occurrence, and evidentiating of an RP in conjunction with the claim of awareness and flick of the wrist is sufficient evidence to doubt human freedom. Wegner, on the other hand, avers that humans ought not to be ascribed freedom due to the body's conscious path that causes unconscious thoughts to actions and our inability to prove mental causation (which Wegner also fails to disprove). Therefore, according to Wegner, going by our causally determined biological makeup, we are not free. Majorly, there is an error where natural (empirical) standards are used to judge a social (abstract) concept.

The fallacy of Hasty Generalisation

Libet could be charged with committing a fallacy of hasty generalisation. Libet examines a simple wrist movement case to affirm a claim that readiness potential precedes conscious intentions. Apart from the error of plotting a non-empirical phenomenon based on an empirical enquiry, the case of simple wrist movement is not enough to

generalise his affirmation for all forms of movement. A counter-argument may be that the experiment was severally conducted, so there is much evidence to affirm the claim. However, such a counter is illegitimate because, rather than assessing various forms of bodily movements with readiness potential, Libet focuses his experiment only on the movement of the wrist. The movement at the wrist alone is insufficient to affirm the claim that the readiness potential precedes conscious intentions in all forms of bodily movements. This objection implies that, given that Libet's claim of the RP's precedence is legitimate, it does not preclude the option that there may be some other bodily actions that have conscious intentions earlier than readiness potential.

Conclusion

The abstract nature of free will does not make it rationally feasible to employ an empirical technique to investigate it. Free will is a philosophical problem. Even though actions could be cognitively and neurobiologically assessed to clarify our understanding of the implications of free will in our actions, one cannot conclude with reliance on empirical studies only. This is because, aside from external factors contributing to the performance of an action, there are internal factors, including conscious (for instance, deliberations considerations in decision-making) and unconscious ways, that empirical studies may not adequately study. An immaterial phenomenon that is mysterious cannot be demystified by the operations of a contrasting realm (material realm). Also, the nature of the assessment of free will should be quite synonymous with that of consciousness. The conceptual approach to consciousness thrives more in demystifying consciousness rather than the empirical approach because the subject of investigation (consciousness) is immaterial.

A likely objection to the advocacy for a conceptual approach to the problem of free will is that there may not be an immediate solution. However, such problems that are immaterial phenomena are not easily understood via empirical assessment. Their solutions are beyond the tests of the brain, the nervous system, and other physical parts of the human body. Empirical studies (like that of Libet and Wegner) would have been the best attempt for a solution to the mystery of free will if there were a possibility to embody the problem such that it no more remains a conceptual problem but an empirical one also.

References

Carruthers G. A problem for Wegner and colleagues' model of the sense of agency. Phenomenology and the Cognitive Sciences 2010; 9(3):341-357.

Chalmers DJ. The conscious mind: In search of a fundamental theory. Oxford Paperbacks, 1997.

Curry O. Who's afraid of the naturalistic fallacy? Evolutionary Psychology 2006; 4(1):264-247.

Deecke L. There are conscious and unconscious agendas in the brain and both are important—Our will can be conscious as well as unconscious. Brain sciences 2012; 2(3):405-420.

Elzein N. Free Will & Empirical Arguments for Epiphenomenalism. In Agency and Causal Explanation in Economics. Springer, 2020; pp.3-20.

Gazzaniga MS. The mind's past. In the Mind's Past. University of California Press, 1998.

Husserl E. The crisis of European sciences and transcendental phenomenology: An introduction to phenomenological philosophy. Northwestern University Press, 1970.

Ladyman J. Understanding philosophy of science. Routledge, 2012.

Leiter B. Nietzsche's Theory of the Will. Philosopher's Imprint 2007; 7:1-15.

Libet B. Unconscious cerebral initiative and the role of conscious will in voluntary action. Behavioral and Brain Sciences 1985; 8(4): 529-539.

Libet B. Mind Time. Cambridge, Mass. Harvard University Press, 2004.

Mele AR. Free will: Theories, analysis, and data. Does consciousness cause behavior MIT Press, 2006;187-206.

Mele AR. Recent work on free will and science. American Philosophical Quarterly 2008; 45(2):107-130.

Mele AR. Effective intentions: The power of conscious will. Oxford University Press, 2009.

Nahmias E. When consciousness matters: a critical review of Daniel Wegner's the illusion of conscious will. Philosophical Psychology 2002; 15(4):527-541.

Nahmias E. Is neuroscience the death of free will? The New York Times, 2011.

Pereboom D. Living without free will. Cambridge University Press, 2006.

Pockett S, Banks WP & Gallagher S (Eds.), Does consciousness cause behavior? MIT Press, 2006.

Radder RH and Meynen G. Does the brain "initiate" freely willed processes? A philosophy of science critique of Libet-type experiments and their interpretation. Theory & Psychology 2013; 23(1): 3-21.

Radin D. Time-reversed human experience: Experimental evidence and implications. Journal of Nonlocality and Remote Mental Interactions 2003; 2:256-279.

Russell B. An outline of philosophy. Routledge, 2009.

Searle J. Chinese room argument. Scholarpedia 2009; 4(8): 3100.

Libet B. Conscious will and responsibility: A tribute to Benjamin Libet. Oxford University Press, 2011.

Smilansky S. Free will and illusion. OUP Oxford, 2000.

Spaak E. No One is Tricking Anyone: A Critique of Wegner's Theory of Conscious Will. 2009. https://eelkespaak.nl/EelkeSpaak_Splijtstof_feb2009.pdf

Wegner DM. The Illusion of conscious will. Cambridge, MA: Bradford Books. MIT Press, 2002.

Wegner DM. Self Is Magic. Are We Free? 2008; p.226-248.

Wegner DM and Wheatley T. Apparent mental causation: Sources of the experience of will. American Psychologist 1999; 54(7):480.

Authors hold copyright with no restrictions. Based on its copyright *Journal of NeuroPhilosophy* (JNphi) produces the final paper in JNphi's layout. This version is given to the public under the Creative Commons license (CC BY). For this reason authors may also publish the final paper in any repository or on any website with a complete citation of the paper.